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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,466	04/15/2004	Chun-Hsiung Wu	WUCH3039/EM	6193
23364	7590	05/25/2006	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			KUHNS, ALLAN R	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,466

Applicant(s)

WU ET AL.

Examiner

Allan Kuhns

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

1. It is suggested that "under one atmospheric pressure" be changed to "at atmospheric pressure" in the specification and claims in order that the former phrase cannot be misconstrued as indicating operations conducted at below atmospheric pressure.

2. The amendment filed March 6, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the aspect that the thermoplastic elastomer is used as a "substrate", beginning in the "Summary Of The Invention" and continuing throughout the specification. This objection is based on a generally accepted definition of "substrate" as "an underlying layer or substratum". This implies that the "raw material" possesses some layer-like shape before it is acted upon while the disclosure as filed simply states that a "raw material" is acted upon.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is based on the aspect of "using a thermoplastic elastomer as a substrate of the thermoplastic elastomeric composite", as in claims 1 and 12 and other references to "substrate" within the claims. It is not

apparent that applicants contemplated the use of the raw material in the form of a substrate as set forth above.

4.The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5.Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. (5,609,703) in view of the admitted prior art set forth in claim 1 itself. Hamada et al. disclose or suggest the basic claimed process of forming a foamed sheet (it is submitted that the sheet of Hamada et al. is of sufficient length to be viewed as continuous) from a thermoplastic elastomeric composite including (1) using a thermoplastic elastomer as a substrate of the thermoplastic elastomeric composite, (2) adding additives, foaming agent and crosslinking agent into the substrate to form the thermoplastic elastomeric composite (note the disclosure of the addition of naphthene process oil as an additive at column 5, lines 57-58 and the use of a peroxide crosslinking agent in the embodiment described at column 3, line 25), (3) conveying or placing the sheet to an oven (column 4, lines 41-47), and (4) enabling the sheet to be baked and foamed in the oven. Since Hamada et al. refer to the use of an "air oven" (column 4, line 46) without the mention of pressure, it is submitted that Hamada et al. contemplate the conduct of the process at atmospheric pressure. It would have been obvious to one of ordinary skill in the art to practice kneading and rolling steps, as in

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claim 1, in order to prepare the composite elastomeric material, since the admitted prior art acknowledges that conventional foaming techniques and devices are used.

6. Applicants' arguments filed March 6, 2006 have been fully considered but they are not persuasive. Applicants' arguments are considered to be moot by the examiner based on the revised grounds of rejection introduced in this Office action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (571) 272-1202. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allan R. Kuhns
ALLAN R. KUHN
PRIMARY EXAMINER AU 1732
5-21-06